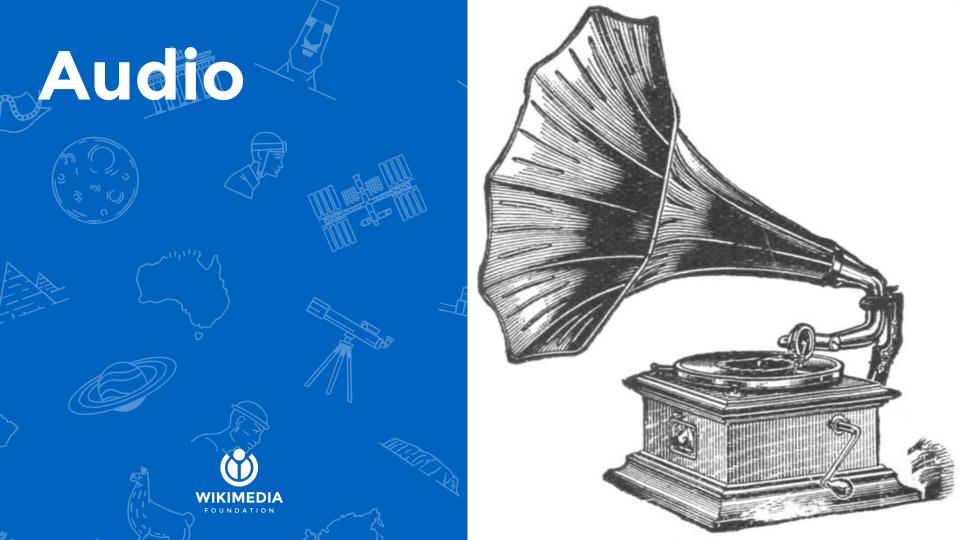
# Video & Rich Media: What Needs Doing



WikiConference North America San Diego, 2016-10-08 Brion Vibber Wikimedia Foundation

# State of things 2016





### What works in audio

- Ogg Vorbis, Opus uploads
- Playback in all desktop browsers
- Playback in Android mobile browsers



#### What's broken in audio

- No mobile playback on iOS (coming soon)
- Upload requires manual conversion of mp3, some way files
- FLAC uploads but doesn't play back
- Direct [[Media:]] links fail in Safari/IE/Edge, poor experience in Chrome/Firefox

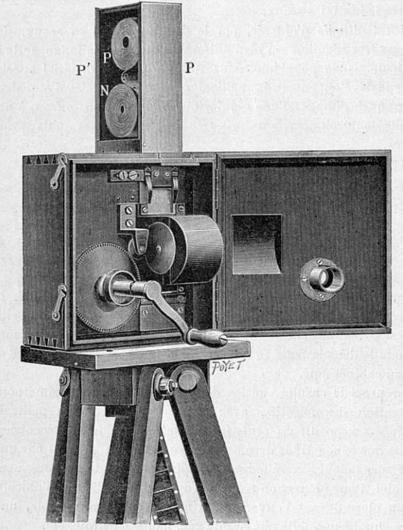


# What's missing in audio

- No support for recording audio oneself without external tools
- Poor support for extracting clips
- Poor seeking support in long audio files
- Can't pair an audio with a video
- Audio player always big, so audio clips for pronunciation often linked with [[Media:]]







# What works in video

- Ogg Theora, WebM uploads
- Playback in all desktop browsers
- Subtitles



### What's broken in video

- Mobile playback on Android, iOS (coming soon)
- No automatic adaptation to net/CPU limits in player
- Playback doesn't integrate into multimedia viewer
- Upload requires manual convertion to Ogg or WebM
- Upload still sometimes flaky for large video files
- Upload requires admin intervention for very large video files



# What's missing in video

- Editors can't specify whether video should play inline vs zoomed
- No way to specify autoplay of loops (versus GIFs which "just work")
- Poor support for extracting clips from a long video
- No on-wiki tools for assembling/editing multiple clips
- Poor administrative tools for managing background encoding jobs



# Panoramic photos





# What works in panoramas

- There are some gadgets / user scripts / site scripts
  - 2d tiled pan/zoom
  - Spherical pan/zoom
- See demo!

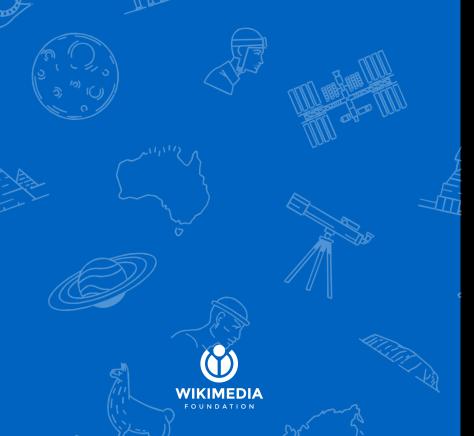


### What's broken in panoramas

- Default view is still the raw image
- Ad-hoc panoramic viewers not reliably available on Wikipedia and sister sites
- Nothing available to third-party wikis using InstantCommons



# 3d models

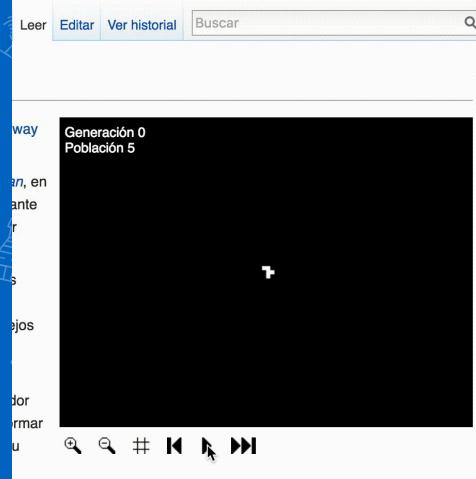


## What works?

- Not yet deployed...
  - 3d extension supports WebGL in-browser rendering of models in some common formats
  - Has integration with MultimediaViewer
- Checking format copyright/patent issues?



# Interactive diagrams & beyond



No has iniciado sesión Discusión Contribuciones Crear una cuenta Acceder

áquinas que, por otro lado, no se utilizarían por la noche.

## What works?

- Not much!
- Some ad-hoc tools done via site JS
  - Spanish Wikipedia example: <u>Juego de la vida</u>
  - Not a lot of safety yet -- site JS has complete control of account

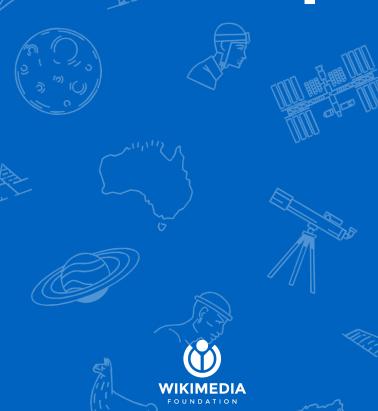


### What could be done?

- Better security for user-supplied JS code via <iframe> isolation and CSP
- Some integration, editing support might be nice
- Explicit fallback media for non-interactive mode (print, no-JS, etc)



# Next steps



# Very soon: mobile

- Finish switching from old kaltura player to video.js
  - Mobile player for Android and iOS
  - Test on desktop via BetaFeatures before making default
- Hack something workable into the mobile apps for now



# Shortly: embedding

- Expand <iframe> embedding support
  - Support all video params
  - Generalize support to other file types...
    - Start with panoramic images
- Use iframe for InstantCommons on audio, video, rich images
  - No longer need local extension setup for video from Commons!
  - Make sure it works with MultimediaViewer!



# External embedding?

- Set up suitable metadata for Facebook, Twitter, etc to attach iframe embeds to links to our media pages
  - Where necessary, contact them for whitelisting



# Next: Popcorn

- Continue work with Internet Archive and Mozilla folks on Popcorn
  - In-browser video editor extract, combine clips
  - Integrate into MediaWiki
  - Extend with auto-generation of credits



### **Curation tools?**

- Uploading lots of clips of raw footage to Commons could be hard on admins there doing review
- Do we need a separate way to categorize raw footage belonging to some project?
- Do we need a separate place to store the raw footage?
- Copyvios, inappropriate material, etc...



### Auto conversion?

- Most source files shot on common tools are MP4/H.264/AAC
- Forcing users to manually convert to Ogg or WebM is very user-hostile
- Conversion tools on wmflabs exist and are commonly used
- Can we figure out how to integrate with UploadWizard on official infrastructure without scaring Legal and community?



# Other tools

- Better editing and translation tools for subtitles?
- Tools to assist in voice-over translation?
- ... what do YOU need?

